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CHINESE SAY DEAL IS OFF FOR U.S. SATELLITES: Expensive wooing of Chinese by U.S. satellite contractors has been, it appears, for naught. Chinese have informed NASA that it won't be able to buy satellites for several years. Decision follows months of concern by U.S. contractors at delay by Chinese in proceeding with project to expand Chinese TV service to thousands of villages using earth terminals linked to low-power TV transmitters.

Chinese obviously have profited by their 2-year round of discussions with U.S., having been granted substantial amount of tutorial experience through their visits to U.S. manufacturing plants, trips by U.S. salesmen & technicians to China.

Among those most disappointed: Comsat, which has been giving (unpaid) consultation to Chinese on system, had expected to be granted long-term contract to handle con- sulting during procurement & implementation phase.

Official Chinese explanation for delay of satellite project: Scarce resources must be devoted to more immediate needs. Chinese also recently announced cancellation of manned space program that just year ago was subject of pictorial spreads in Chinese press. China could presumably reactivate its contacts with U.S., but may never purchase satellites. They now are said to be working harder than ever to launch 2 home-made "STW" C-band satellites themselves, atop Long March 3 launcher, as early as 1982.

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ARIANE'S AMERICAN CONNECTION: French space-launch venture Arianespace has retained Grumman Aerospace, Bethpage, N.Y., as its U.S. marketing liaison. Grumman will work on commission basis to sell 3-stage Ariane flights (flight record is one success, one failure) to U.S. companies. Grumman also will provide limited technical support to Arianespace.

Grumman's marketing operation for Arianespace will be managed by Bethpage with support from Washington & L.A. offices. Bethpage will handle N.Y.-area customers (RCA, Western Union, AT&T, GTE); Washington will have liaison with NASA, NOAA, SBS; L.A. will work with west coast spacecraft contractors (Ford, Hughes, TRW).

Grumman admits that Arianespace marketing will be only minor activity within company, but could grow if Arianespace is correct that there is market of 200 satellites to be launched in this decade, of which 20%-30% will be launched by Ariane.

Move puts Grumman back into space, albeit in limited role. Grumman made lunar lander for Apollo, since then has been primarily in military aircraft business (biggest product: F-14 fighter). Grumman sold its rights to Gulfstream series of business aircraft to new corp., Gulfstream American, also is manufacturer of controversial mass transit buses.

Spokesman said Grumman "doesn't necessarily look at the Ariane as being a competitor to the shuttle. The shuttle's payload capacity is a lot bigger. We see the principal competition as the Delta and the Centaurs."

Arianespace, meanwhile, announced in Paris that it has 7 firm orders and 11 launch slot reservations for operations to start at end of 1982. No U.S. companies have placed firm order for Ariane; confirmed manifest now shows Europe's ECS 2 & 3, Intelsat V-F8, French Telecom 1B, Germany's TV-Sat, France's TDF, and France's SPOT, to be launched with Swedish Viking spacecraft.

Holding slot reservations are European Space Agency, for Giotto, L-Sat & Hipparcos; British Aerospace and Telsat for a DBS satellite; from Intelsat for another V satellite; from Arabsat, for one satellite; Western Union, for a Westar; from RCA, for a Satcom; from Columbia, for 2 SATCOLs, and from Radio-Tele Luxembourg, for a DBS spacecraft. In discussion are contracts with Telesat Canada; with U.K., for successor to Skynet military communications satellite system; with Italy for Italsat; with GTE, AT&T, Hughes Commmunications and Southern Pacific Communications.

MICRODYNE STREAMLINING ANTENNAS UNIT: Problems at Antennas for Communications unit of Microdyne were factor that resulted in lower earnings per share on sharply higher sales in 1980, we are told.

Management restructuring is now underway, with large cutback of personnel at AFC, with aim of creating much leaner marketing organization. Howard Hubbard, exec. vp in charge of AFC, will remain in charge of unit, reporting to Microdyne Chmn. Louis Wolcott, who told us he's extremely optimistic about 1981. Wolcott disclosed 15% price rise on "some" antenna products.

Sales of Microdyne climbed 35% in year ending Nov. 1980, to $23.7 million (up from $17.5 million year before). Earnings increased to $3.2 million ($1.16 per share) after stock split, up from $2.9 million ($1.18) in preceding year, although net income in 1979 excluded $229,000 extraordinary item worth 9¢ per share. Wolcott said sales growth was primarily due to continued penetration of satellite TV industry, expansion of hotel-motel market. But Wolcott said "we continue to be disappointed by the results reported by our antenna subsidiary. We are taking steps to correct this situation."

Antennas for Communications was merged with Microdyne last year in exchange of stock. Company's products are regarded as first rate within industry; among its big sellers are 3.6- and 4.5-m parabolic TVRO antennas, plus line of 3 horn antennas, used for both TVRO and point-to-point microwave installations. Merger of Antennas with Microdyne was seen at time as opportunity for 2 companies to cooperate in marketing turnkey TVRO installations, using Microdyne's line of receivers. This effort has been success by many benchmarks, with capture of Holiday Inn HI-Net business from Scientific-Atlanta a particular triumph. But profits haven't yet flowed from association, and this is now Wolcott's priority.

Wolcott said Microdyne expects "big increase in HI-Net dishes" this year because franchise owners are beginning to order systems. "Since May, we have gotten 100% of the H-I requirements and S-A has got none." HI-Net shipments since May total 150 units, have been running HI-Net about $13,000 per installation.

Wolcott said biggest growth this year will be in hotel-motel market, with condominiums strong, additional 2nd dishes for cable operators picking up after launch of Satcom 3-R this summer. Apartments and trailer parks may be less good than hotels-condos because their population is less stable. Total home market this year may total 1,000 units, in opinion of Wolcott, with market taking off in 1982 to perhaps 5,000, with 40-50% annual growth thereafter. Wolcott doesn't see prices of C-band earth stations dropping to $1,500 level predicted by some others.

Needed to spark big take-off in hotel-condo-home market: Availability of good pay package. HBO isn't selling service to this market; Warner Amex Satellite Entertainment sells only if there's no competing cable operator. Hope may be Showtime, reportedly reevaluating its previous refusal to deal.

"I just came back from CES in Vegas last week and they're quite excited about it," Wolcott reports (see story below). "There are quite a few systems now that go for $10,000 in the home market."

HOMESAT AT CES: Distributors, reps & dealers gathered around earth station antennas in Las Vegas Convention Center parking lot like moths around flame, 5 exhibitors comprising first major home satellite contingent at CES reporting extremely high interest.

Earth station companies were holding out lure of declining prices as they sought dealers & distributors. Some dishes in parking lot used new techniques -- such as sectional panels or lightweight screening -- and some looked a little sleazy.

Downlink made perhaps largest effort, using turnkey approach, including installation, at $5,000-$7,000. Others exibiting: (1) Anixter-Mark, with home package at under $10,000, installation & shipping extra. (2) Third Wave Communications, complete system at $10,000 (shipping, interference search & installation $450-$2,000 extra). (3) Stargazer Systems, setting up franchise operation, promoting neighborhood "mini-cable" systems, with packages from $4,995, plus installation. (4) Viking, with packages for both domestic & export trade.

CHEAPER SYSTEM FOR SMALL NETWORKS?: Frequency Division Multiple Access was touted last week over other systems for small networks by Scientific Atlanta's Gen. Mgr. James Gray. Speaking at Communication Networks conference in Houston last week, Gray said FDMA is cheaper for networks with 5 stations or less. "A lot of people are hyping other systems," Gray said, "but I think FDMA is cheaper to use than TDMA in most small cases." Gray said FDMA saves money because it needs less power than TDMA in burst mode. It also has lower entry cost for small users. He called FDMA especially economical for dedicated point-to-point applications.

Gray warned that not every system would save money with FDMA. "In general, it is cheaper for small networks," he said, "but each case is different, and it will depend upon your specific application." S-A has concentrated on FM technology, currently has no announced Time Division Multiple Access (TDMA) terminals, although S-A equipment can be used in conjunction with equipment of other manufacturers to create TDMA networks.

C-SPAN SHOPPING FOR TRANSPONDER: C-SPAN intends to expand its 8-hour daily service to 24 hours, creating requirement for dedicated transponder. Satellite network, best known for coverage of House of Representatives, hopes to stay on Satcom 1, possibly on transponder owned by Premiere pay-TV service.

C-SPAN is now sharing TR-9 with USA Network, which wants C-SPAN off within 2 years. C-SPAN head Brian Lamb told us: "We will get our own transponder. It is not final as to where we will go, but there is a strong possibility we will be able to stay on Satcom 1. We are talking to a lot of people and are very optimistic that we will have a transponder, possibly as early as fall of this year. It is important to try to stay on Satcom 1 because we have 915 communities, with 7 million homes, watching us now, making us the 3rd largest satellite network."

New service will include more coverage of congressional hearings, House sessions, call-in programs with politicians and reporters, and "Close-Up" series with high school students. C-SPAN hopes to add coverage of Senate, if allowed this session. Said Lamb: "We were basically an information service in the past. We didn't explain things. We want to transmit the House and Senate on the same transponder and tie it all together. We will go gavel to gavel, in the House or Senate or at hearings, sometimes going back and forth to pick up the most interesting. We are now doing most of the confirmation hearings gavel to gavel."

C-SPAN may start accepting advertising. Now charging cable systems 1¢ per month per subscriber, Lamb said network "holds out the possibility of getting money from foundations and corporations. Running advertising is a last resort. We may have some ads on some programs, but not in the middle of House and Senate sessions." Expansion will increase network budget by $2-$3 million annually, depending on cost of transponder.

CNES STUDIES SPACE FACTORY: French space agency (CNES) is promoting development of an automated space materials processing factory called SOLARIS (Station Orbitale Laboratoire Automatique Rendezvous et Interventions Spatiales). Project, for 2nd half of this decade, would involve 3 space systems:

(1) Long-life automatic station in orbit for production of materials in weightlessness. (2) Automated, partially recoverable transportation vehicles, able to accomplish rendezvous and docking with space station. (3) Remote manipulator robots operated from earth for maintenance & repair of orbiter. Systems will be controlled through use of tracking & data relay type satellites similar to U.S.-developed TDRSS/Advanced Westar system, although built by European industry. Improved Ariane launcher would be required to put SOLARIS systems into orbit.

BACKGROUND REPORT--INDIA'S SPACE PROGRAM: Indians now plan to launch 23 satellites through end of decade, at cost of $1 billion, in 3rd world's most ambitious space development program. More than 10,000 are employed in effort, according to reports from New Delhi, with emphasis on civil applications spacecraft.

Despite official insistence that India's space program doesn't have objective of building offensive military capability, India's neighbors are concerned that emphasis on indigenous launcher capability signals intent to build delivery system for India's atomic weapons. India also is seen building on its remote sensing experience to construct military reconnaissance systems.

Launcher development now is concentrated on Polar Satellite Launch vehicle (PSLV), intended to boost India's home-built 600-kg remote sensing satellites from 1986 onward. PSLV is then to be upgraded to boost satellites in geostationary orbit (GEO), with India intending to build & launch its own operational hybrid communications & weather satellites for service in 1990. Satellites would replace Insat 1 space system now being built for India by Ford Aerospace & Communications.

Indian officials concerned with space say that emphasis is to change in 1990s to materials research, with Indian astronauts working on orbital stations, with assistance from Soviets.

Departments:

MANNED SPACEFLIGHT

First "spationaute" (French word for astronaut) is scheduled to fly aboard a Soviet Soyuz T spacecraft in April 1982, will work inside

forthcoming Salyut 7 space station, to be launched at end of 1981 or early next year. Candidates for mission are Patrick Baudry and Jean-Loup Chretien.

Soviets plan to commemorate 20th anniversary of Yuri Gagarin's first manned spaceflight with mission to Salyut 6 in April. Soviets also plan mission to Salyut 6 with first Mongolian cosmonaut and first Rumanian cosmonaut, between April & July.

EARTH STATIONS

Home satellite receiving system at $5,000-$7,500 installed was demonstrated at Winter Consumer Electronics Show by Downlink Inc., subsidiary of communications equipment maker Black & White Enterprises (Box 33, Putnam, Conn. 06260). Company says it's talking with 600 prospective dealers, is setting up first professional home satellite TV dealer network. Basic installation includes antenna, furniture styled control console, antenna and downconverter-receiver located at antenna. Company is offering 8- & 12-ft. aluminum-screen spherical antennas and modular antenna panels which can be assembled into 8-, 12- or 16-ft. units. Two receivers are offered, tuning 3.7-4.2 GHz to receive all present & future satellites carrying TV & audio. Downlink installations will be sold through dealers only, carry one-year parts & labor warranty.

Radiation Systems, Sterling, Va., received $1.5 million order from Hughes Aircraft Space & Communications Group for 12-m TT&C earth station antenna. Universal Antennas unit of Radiation Systems, located in Dallas, will build unit.

SATELLITE TV ACQUIRES NEW ORLEANS PAY-TV SYSTEM

New Orleans MDS system, Entertainment Network, with 9,000 subscribers, has been acquired by Satellite TV & Associated Resources (STAR) for $3 million in cash, notes and 60,000 shares of STAR's common stock. Byron Lasky, STAR chmn., said acquisition gives STAR total of 18,000 subscribers for pay TV via MDS. Other STAR's MDS systems: Richmond, Norfolk, Louisville, Birmingham.

FORD WINS ORDER FOR ADDITIONAL NATO III, OPTION ON 2ND

Air Force Space Div. ordered additional NATO III communications satellite from Ford Aerospace & Communications, long-lead items on 2nd.

TV MANAGERS TO QUERY REAGAN FCC TEAM VIA WESTAR

Members of Assn. of Independent TV Stations (INTV) will meet Reagan's transition team via a Westar teleconference Jan. 19. Michael Gardner, head of team, will appear with former FCC Chairmen Dean Burch & Richard Wiley and former Comr. Margita White, appearing at studio at WTTG Washington, uplinked through PBS in Bren Mar, Va., downlinked to Century Plaza Hotel in L.A. Two-way audio will permit questioning of transition team by convention attendees. Wold Communications is handling.

TELECONFERENCE SAVINGS OVER $400,000

Satellite teleconferencing saved Picker Corp. more than $400,000 while producing excellent results, according to Telephone Mktg.

Report. Picker, manufacturer of medical equipment, spent less than $100,000 on teleconference linking sales reps at 30 Holiday Inn sites. Budget was $60,000 for production, $15,000 to Holiday Inn, $10,000 for local travel to Holiday Inn locations. Program included 2-hour videotape, one-hour Q-&-A. Cost of bringing all participants to hq would have been $500,000. Picker Communications Dir. Frank Dean organized event. Contact: 816-449-3000.

FRENCH START NEW SPACE ASSN.

"Club de l'Espace" for promotion of space activities has been organized in Paris by AAAF (Association Aeronautique et Astronautique de France) and AeCF (AeroClub de France). Group is publishing quarterly newsletter (2nd issue is devoted to activities of Arianespace), is organizing luncheon debates. Contact: 80 rue Lauriston, F-75116 Paris. Telephone: 704-80-68.

FCC WANTS TO RECONSIDER COMSAT-DoD CASE

FCC asked D.C. Appeals Court to remand to Commission case involving application of Comsat to provide service to Defense Dept. through dedicated earth stations at Hickam, Hawaii and Finegayan, Guam. FCC had denied Comsat's Sec. 214 application to provide service, on grounds that it would create cross-subsidization issue because cost added to Comsat's rate base wouldn't be met by payments of Defense Dept. FCC said it asked for remand because "after reviewing the record in light of the information contained in [Defense Dept.] motion for summary reversal, the Commission determined certain facts were clouded and should be explored and clarified in an evidentiary hearing." Information: Jack Smith, 202-632-7112.

AMERICOM TO PROVIDE SHUTTLE COMMUNICATIONS VIA SATCOM

RCA Americom will build 10-m earth station at NASA's Marshall Space Flight Center to support shuttle operations. New earth station will tie in Marshall to existing network linking Johnson & Kennedy space centers, NASA tracking stations at Goldstone, Cal. & Kokee Park, Hawaii, Dryden Flight Research Center, Cal., and NASA's main communications center at Goddard Space Flight Center. New link will handle video & audio plus data connections at up to 50 mbps -- fastest rate ever in a domestic satellite communications network.

AIR FORCE LAUNCHES NEW SDS SATELLITE

Classified launch from Vandenberg AFB Dec. 13 appears to have been another Satellite Data Systems spacecraft. Air Force acknowledged launch using Titan III-B booster, declined to specify what type of satellite was orbited. Orbital characteristics of booster were consistent with SDS payload, however. SDS satellites are put into elliptical orbits, used for communications links to locations at high latitudes.

ON THE MEETING CIRCUIT

Strategic planning for satellite systems in '80s is theme of Satcom Expo '81, sponsored by new International Assn. of Satellite Users (IASU) April 13-15 at Washington Hilton. Conference, designed for executives who want to expand or improve satellite telecommunications, includes advice on how to achieve most cost efficient

satellite system, panel on problems of frequency assignment demands, discussion of policy issues by Richard Neustadt, Carter White House communications staffer, talk by ITU representative. Details: Nancy Daniels, 703-893-2217.

BRITISH SET SATELLITE SERVICES

British Telecom will offer satellite communications links to Europe, via Eutelsat's ECS system, starting 1983; also plans lease of transponder space on French Telecom 1 satellite system for intra-U.K. services using small earth terminals.

SCIENTIFIC-ATLANTA WINS ISRO ORDER

Order for test instruments worth $262,000 has been placed with Scientific-Atlanta's Spectral Dynamics instrumentation unit by Indian Space Research Organization. System consists of control system for 2 test shakers, plus multi-shaker random control unit.

SBS SELLS VOICE DATA NETWORK TO SBS

Voice and 56 kbps data service, starting July 1982, has been ordered from SBS by Crocker National Bank with earth stations in L.A., San Francisco, El Segundo, Cal. & N.Y. Two terminals are at Crocker locations (El Segundo & San Francisco); others will be at service points. Crocker has ordered Communications Network Service B -- stations will be shared by other users. Said John Broderick, senior Crocker vp: "This early entry into satellite communications will position us to take advantage of advanced applications such as teleconferencing that will be important in maintaining our leadership role in banking." Crocker also is participating in local data distribution demonstration within metropolitan areas, sponsored by SBS, Tymnet & Local Digital Distribution Co. (LDC) partnership of Aetna & M/A-Com. Cable TV and cellular microwave radio systems will be used for local distribution; with SBS handling transcontinental portion.

Satellite Personals:

Charles Walsh, ex-CBS TV Stations Div., joins CBS Cable as dir., national sales.

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